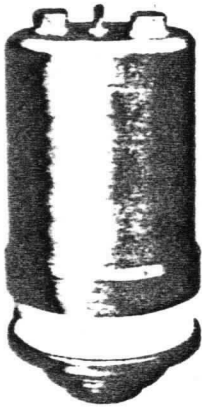


4CW100,000G



The 4CW100,000G is a tetrode intended for Class C HF and VHF service. It features high-stability pyrolytic graphite grids and an internal structure which permits high efficiency operation to 250 MHz. The tube is also recommended for FM broadcast service and for VHF-TV linear amplifier service. The anode is rated for 100 kW with water cooling.

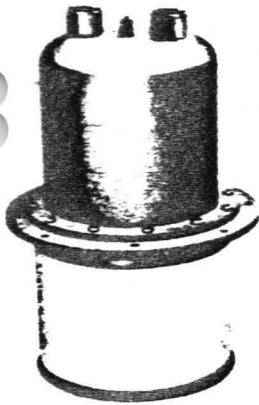
CHARACTERISTICS

Plate Dissipation (Max.)	100,000 watts
Screen Dissipation (Max.)	1,500 watts
Grid Dissipation (Max.)	1,000 watts
Frequency for Max. Ratings (CW)	110 MHz
Cooling	Water and Forced Air
Filament	Thoriated Tungsten mesh
Voltage	15.0 volts
Current	170 amperes
Capacitances (Gnd. Cath. Connection)	
Input	445 pF
Output	37.0 pF
Feed-through	1.8 pF
Capacitances (Gnd. Grid Connection)	
Input	169 pF
Output	39.0 pF
Feed-through	0.17 pF
Amplification Factor ($g_1 - g_2$)	8
Base	Special Coaxial
Recommended Air System Socket	SK-2400
Maximum Seal & Anode Core Temperature	250°C
Maximum Length	12.7 in; 32.3 cm
Maximum Diameter	6.4 in; 16.3 cm
Weight (approximate)	27.2 lb; 12.3 kg
Operating Position	Vertical, base up or down

Class of Operation	Type of Service	MAXIMUM RATINGS		TYPICAL OPERATION				
		Plate Voltage (volts)	Plate Current (amps)	Plate Voltage (volts)	Screen Voltage (volts)	Plate Current (amps)	Drive Power (watts)	Output Power (kW)
C	RF Amplifier	14,000	12.5	10,600	800	7.0	250	60
C	RF Amplifier†	14,000	12.5	11,500	550	6.4	1,000	53

†100.5 MHz

4CW150,000E



The 4CW150,000E is intended for use as a Class C RF amplifier or oscillator, a Class AB push-pull AF amplifier or modulator as well as a plate-and-screen-modulated Class C RF amplifier. In pulse modulator service, it can deliver a peak output of 4 megawatts. The tube is characterized by low input and feedback capacitances and low internal lead inductance.

CHARACTERISTICS

Plate Dissipation (Max.)	150,000 watts
Screen Dissipation (Max.)	1,750 watts
Grid Dissipation (Max.)	500 watts
Frequency for Max. Ratings (CW)	110 MHz
Cooling	Water and Forced Air
Filament	Thoriated Tungsten mesh
Voltage	15.5 volts
Current	215 amperes
Capacitances (Gnd. Cath. Connection)	
Input	370 pF
Output	60.0 pF
Feed-through	1.0 pF
Capacitances (Gnd. Grid Connection)	
Input	175 pF
Output	60.0 pF
Feed-through	0.35 pF
Base	Special Coaxial
Recommended Air System Socket	SK-2011A
Maximum Seal & Anode Core Temperature	250°C
Maximum Length	14.3 in; 36.2 cm
Maximum Diameter	9.5 in; 24.2 cm
Weight (approximate)	47 lb; 21.4 kg
Operating Position	Vertical, base up or down

Class of Operation	Type of Service	MAXIMUM RATINGS		TYPICAL OPERATION				
		Plate Voltage (volts)	Plate Current (amps)	Plate Voltage (volts)	Screen Voltage (volts)	Plate Current (amps)	Drive Power (watts)	Output Power (kW)
C	RF Amplifier	22,000	20.0	20,000	1,500	15.2	120	220
C	RF Amplifier Plate Modulated	17,500	20.0	15,000	750	11.7	530	140
AB ₁	RF Linear Amplifier	22,000	20.0	18,000	1,500	13.5	—	168
—	Pulse Modulator	40,000	200†	40,000	2,500	122‡	—	4,100‡

†Cathode current, pulse

‡Pulse value